

## MARKED-UP COPY OF AMENDED CLAIMS:

4. (~~Thrice~~~~Twice~~ Amended) The corpectomy device of claim ~~411~~ wherein said locking clip and said second member includes interengaging threads for locking said first member and said second member in a relative axial position with respect to one another, said locking clip being rotatably mounted on said first member for rotation into and out of engagement with said threads.

5. (~~Twice~~~~Thrice~~ Amended) The corpectomy device of claim ~~411~~, wherein said first member comprises a hollow member, said first member and said second member defining a chamber therebetween.

11. (~~Thrice~~~~Twice~~ Amended) The corpectomy device of claim ~~411~~ wherein said first member comprises a hollow member having a longitudinal axis and perforations for permitting ingrowth of bone, blood vessels and other tissue, said second member moveable in an axial direction with respect to said first member and having perforations for permitting ingrowth of bone, blood vessels and other tissue, said second member defining a chamber with said first member for movement in said axial direction; and said perforations includes:

i) elongated perforations extending in the axial direction on one of said first member and said second member; and

26. (~~Thrice~~<sup>Twice</sup> Amended) The corpectomy device of claim ~~41~~<sup>41</sup> wherein said first member comprises a hollow, outer tubular member having a longitudinal axis and a passage,

said second member comprises an inner tubular member moveable in an axial direction with respect to said first member, said second member defining a chamber with said first member and being slidably and telescopingly received in said passage of said first member for movement in said axial direction; and said outer tubular member including a wall having an inner surface defining said passage and an outer surface, said outer surface defining a circular cross-sectional shape.

REMARKS

This is a response to the Official Action mailed April 9, 2002, in which claims 1-15 and 18-26 have been rejected and claims 27-33 have been allowed. A petition for a one-month extension of time, extending the time for response from July 9, 2002 to and including August 9, 2002, is enclosed herewith.

Applicants greatly appreciate the indication that claims 27-33 have been allowed and that claim 19 is directed to allowable subject matter. The Official Action indicates that claim 19 would be allowed if amended to overcome the rejections under 35 U.S.C. § 112, second paragraph.

Claims 5, 11 and 19-26 were rejected under 35 U.S.C. § 112, second paragraph for indefiniteness. More specifically, the Official Action states that the recitation of "a hollow member" and an "outer tubular member" is confusing. Claim 1 has been cancelled and replaced with claim 41, which requires a first member and a second member that are movable with respect to one another in an axial direction. In certain embodiments disclosed by the present application, the first member may comprise a hollow member in which a second member may be received. One example of a hollow member is a tubular member. (See FIGS. 1 and 15). The first member and the second member may both comprise tubular members, and the second member may comprise a tubular member that is received in the first member. Thus, the first member may comprise an outer tubular member in that the second member is received within the outer tubular member. Thus, Applicants assert that claims 5, 11 and 19-26 are not indefinite and are otherwise allowable.

Claims 1 and 3-5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Saggari, U.S. Patent No. 5,702,455 ("Saggari"). Claim 1 has been cancelled and new claim 41 is now presented in its place. New claim 41 requires a

first member having a longitudinal axis and a second member that are movable with respect to one another, in the axial direction. Claim 41 requires a locking clip rotatably mounted on the first member and movable between a first unlocked position, in which the locking clip is engageable with the second member, and a second locked position, for allowing the first member and the second member to move in relative axial positions with respect to one another.

Saggar discloses an adjustable prosthesis for implantation in the spine. A first bearing member 2 and second bearing member 3 comprise hollow tubular members that are internally threaded. The position of each member with respect to the other is determined by engagement with an adjustment member 4. The adjustment member 4 comprises an externally threaded rod having a tool engageable portion 14. The tool engageable portion 14 is shown in Fig. 1 as being disposed at about the middle of the adjustment member 4 so that the externally threaded portion of the adjustment member 4 extends in both directions away from the tool engageable portion 14. In use, the bearing member 2 and bearing member 3 are threaded onto the adjustment member 4 until each bearing member abuts against the tool engageable portion 14. The relative positions of the bearing member 2 and bearing member 3 with respect to one another are adjusted by engaging portion 14 with a tool and rotating the adjustment member 4 so that the interaction of the threads within the hollow bearing members with the threads on the adjustment member 4 axially displaces bearing member 2 and bearing member 3 away from one another.

The overall height for the Saggar prosthesis is adjusted as discussed above. However, the positions of bearing member 2 and bearing member 3 are not fixed until set screws 16 are threaded through threaded apertures in the bearing members until the set screws engage the adjustment member 4. Saggar

C

discloses that after the prosthesis is adjusted to engage vertebrae in the spine:

A set screw 16 is then inserted through one of the threaded apertures 3 into *locking* engagement with a threaded portion 13 or 13'.

Col. 4, lines 16-18 (emphasis added).

Claim 41 specifically requires a locking clip rotatably mounted on the first member and having a locked position in which the locking clip engages the second member. Claim 41 further requires an unlocked position for allowing the first member and second member to move with respect to one another. By contrast, once the bearing member 2 and bearing member 3 are threaded onto the adjustment member 4 in *Saggar*, the foregoing parts do not have an unlocked position in which the bearing members can move and a locked position in which the parts are engaged with one another.

Furthermore, claim 41 specifically requires that the locking clip is rotatably mounted on the first member. The Official Action states that the adjustment member 4 disclosed by *Saggar* locks the positions of the bearing members. However, this is inaccurate. *Saggar* discloses that the adjustment member 4 is used to adjust the position of the bearing member 2 and bearing member 3 with respect to one another. At any time before the fixing of the bearing members by applying the set screws, the adjustment member 4 can be rotated to move the bearing members axially. The bearing members may bear against the tool engageable portion 14 when the apparatus is arranged to have the minimum height. However, the tool engageable portion 14 is not *rotatably mounted* on one of the bearing members.

Claims 3-5 depend directly or indirectly upon claim 41. Thus, claims 1 and 3-5 are unanticipated by *Saggar* and otherwise allowable for the reasons discussed above.

C

Claims 1-9, 13-15, 18 and 26 were rejected under 35 U.S.C. § 102(a) as being anticipated by *Schär*, et al., International Publication No. WO 98/46173 ("*Schär*"). It is apparent from the figures of *Schär* that *Schär* does not disclose a locking clip rotatably mounted on one of the hollow members. This reference is in the German language. However, the corresponding U.S. Patent No. 6,176,881 ("the '881 patent") is in English. In one embodiment, the '881 patent discloses a spring 13 having a catch mechanism 14 that engages a corresponding catch mechanism 5 on the inner hollow member 1. The outer hollow member 2 has a groove 12 for receiving the spring 13. The spring 13 is disposed in the groove 12 so that the catch mechanisms engage one another. The catch mechanisms are shown as interengaging teeth. The spring must be stretched in order to allow the movable members to be adjusted in position.

In another embodiment, the position of the spring is fixed by a post 21, as shown in Fig. 5. The embodiments shown in FIGS. 5 and 6 actually teach away from the present invention. *Schär* discloses that "[a] pin 21 is inserted into an opening 23 passing radially through the exterior hollow body 2, engaging in a notch 22 on the top end face 20 of the spring 13, thus preventing the spring 13 from rotating about the central axis 3." Col. 3, lines 37-41. *Schär* further discloses that the embodiment of FIG. 6 includes "[a]n elastic strap 24 with free ends 25, 26 that are bent outward and can be latched into longitudinal slits 27 on the exterior hollow body 2 secures the two hollow bodies 1, 2 to prevent rotation." Col. 3, lines 43-47.

Thus, *Schär* does not disclose "a locking clip rotatably mounted on the first member," as required by claim 41. The spring disclosed by *Schär* snaps into position to engage the teeth on the hollow member. In order to adjust the positions of

C

the hollow members, the spring must be stretched outwardly so that the spring is disengaged from the teeth. The spring is not movably mounted or rotatably mounted on the prosthesis. Rather, the spring is biased into engagement with the teeth on one of the members. Claims 2-9, 13-15, 18 and 26 depend directly or indirectly upon claim 41. Thus, claims 2-9, 13-15, 18, 26 and 41 are unanticipated by *Schär* and otherwise allowable for the reasons discussed above.

Claims 10-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Schär* in view of *Studer, et al.*, U.S. Patent No. 6,193,756 ("*Studer*") and claim 25 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Schär* in view of *Wu*, U.S. Patent No. 4,553,273 ("*Wu*"). *Studer* was cited for elongated perforations on a tubular support body for implantation into the spine and *Wu* was cited for polygonal movable components. Applicants note that claim 25 requires that the outer tubular member has an inner surface with a different shape than the outer surface thereof. Claims 10-12 and claim 25 depend directly or indirectly upon claim 41. Thus, applicants assert that claims 10-12 and claim 25 are patentable over the cited references for the reasons discussed above.

Accordingly, Applicants respectfully solicit reconsideration of the pending claims and the issuance of a notice of allowance for all the pending claims.

If this response raises any issues, Applicants encourage the Examiner to contact Applicants' attorney at telephone number below. If there is any fee due in connection

Application No.: 09/388,726

Docket No.: SPINE 3.0-029



with this response, the Examiner is authorized to charge our  
Deposit Account No. 12-1095 therefor.

Dated: August 9, 2002

Respectfully submitted,

By 

Kimberly V. Perry

Registration No.: 43,612

LERNER, DAVID, LITTENBERG,

KRUMHOLZ & MENTLIK, LLP

600 South Avenue West

Westfield, New Jersey 07090

(908) 654-5000

Attorneys for Applicant

382479\_1.DOC

C